

FIG. 1

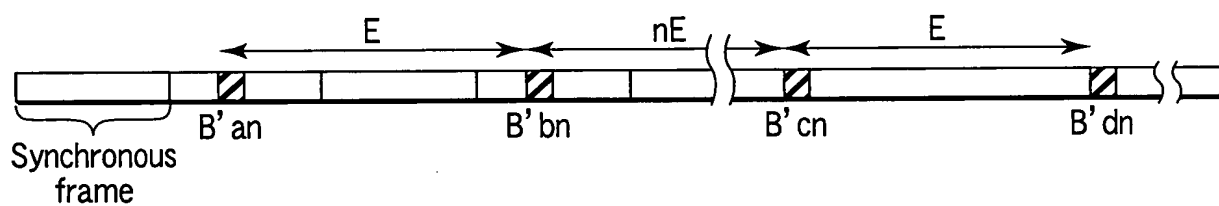


FIG. 3

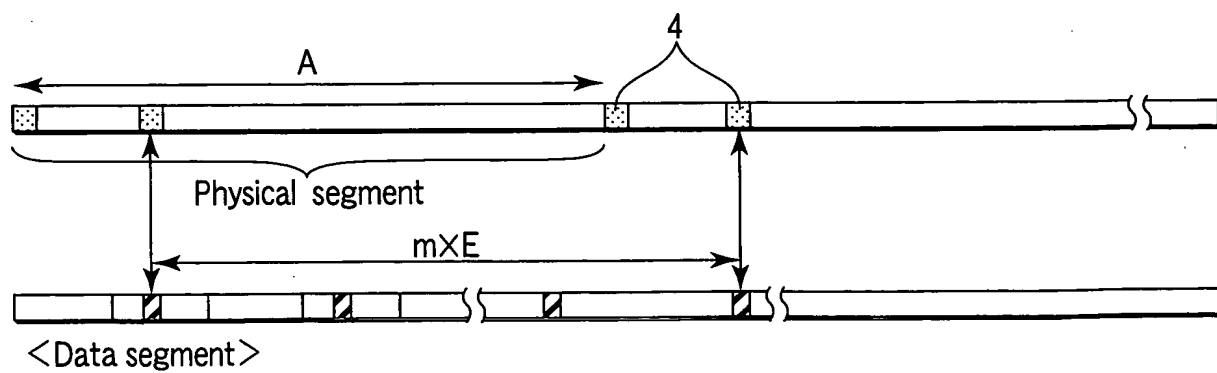


FIG. 4

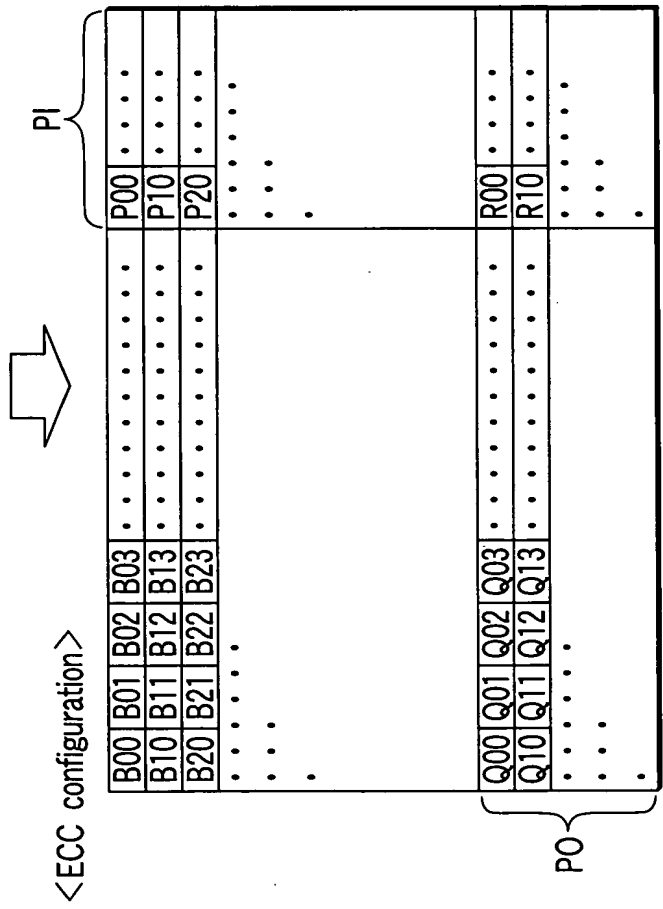
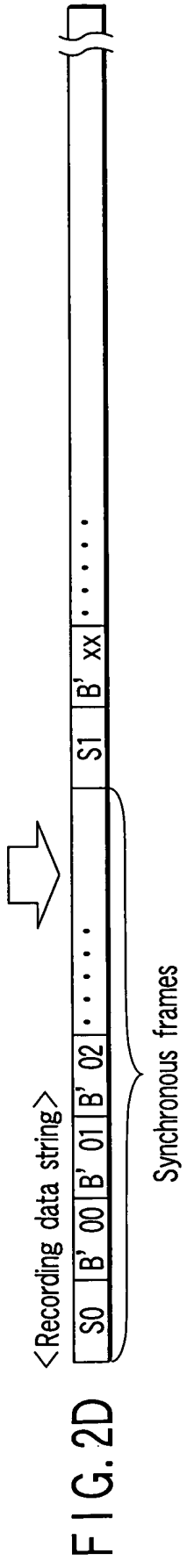
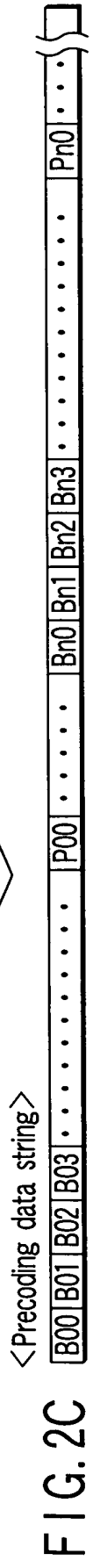
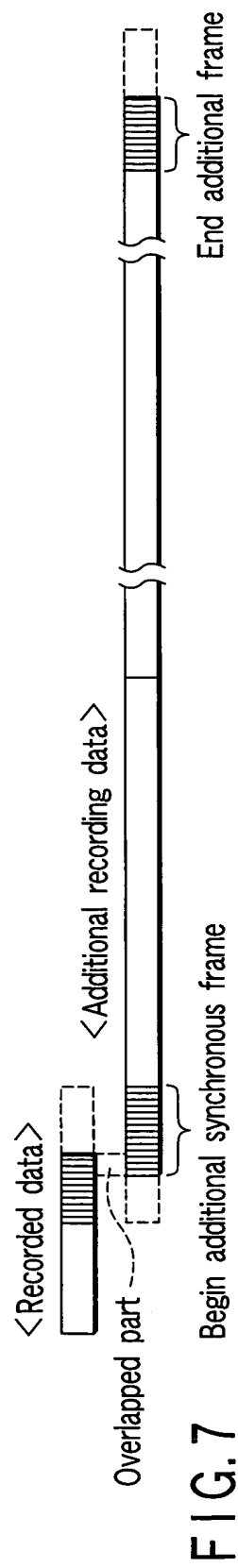
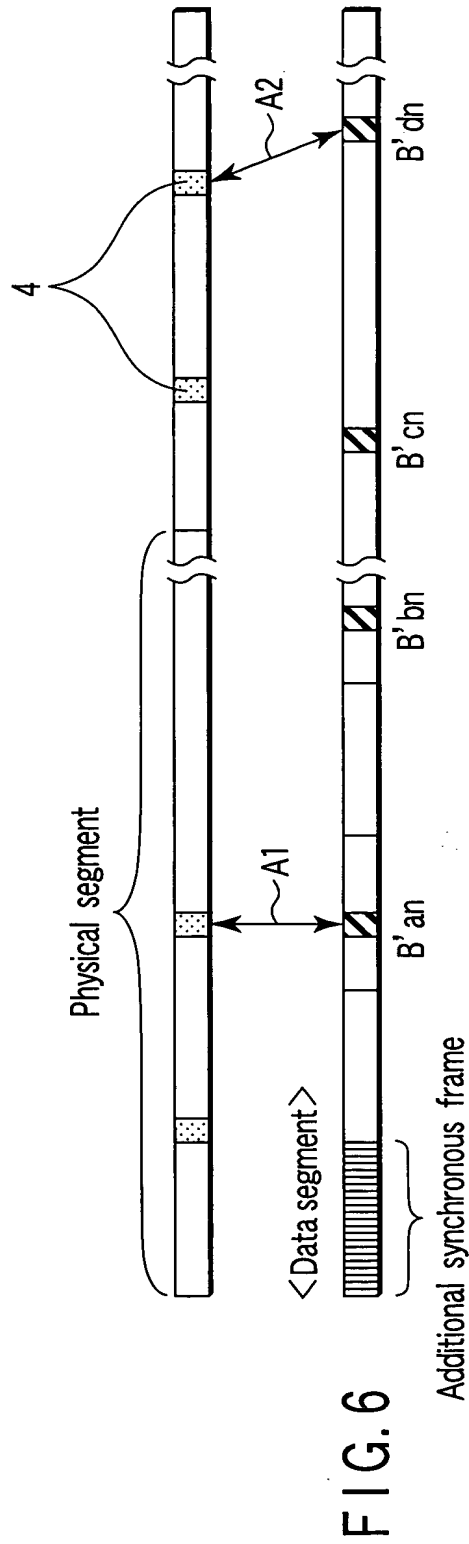
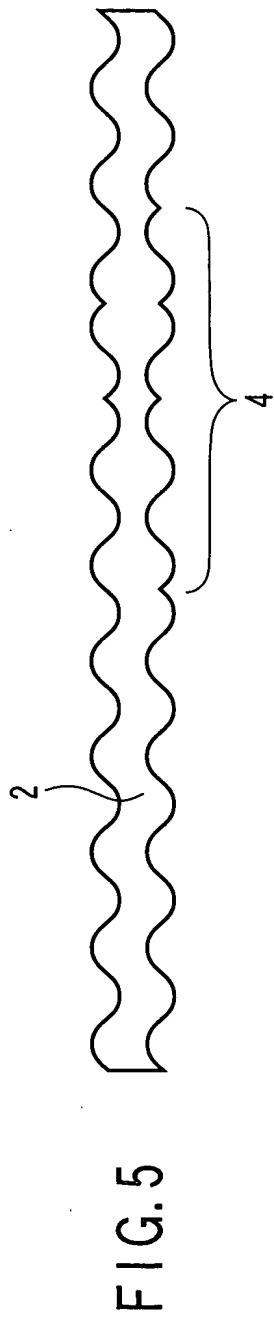


FIG. 2B





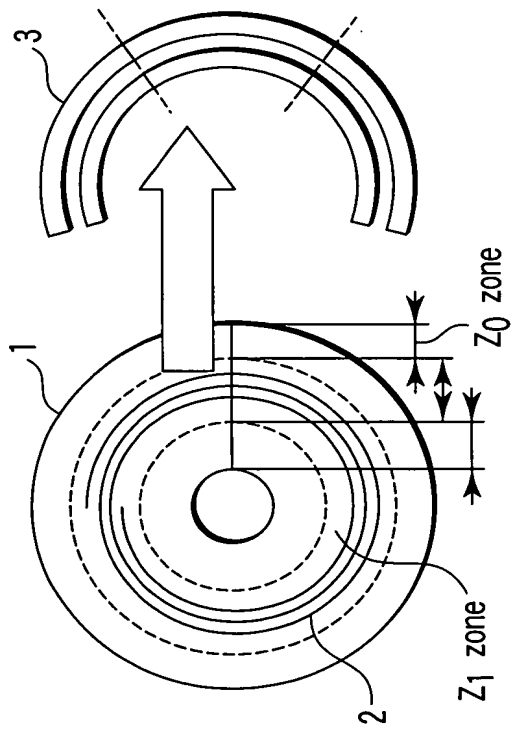


FIG. 8

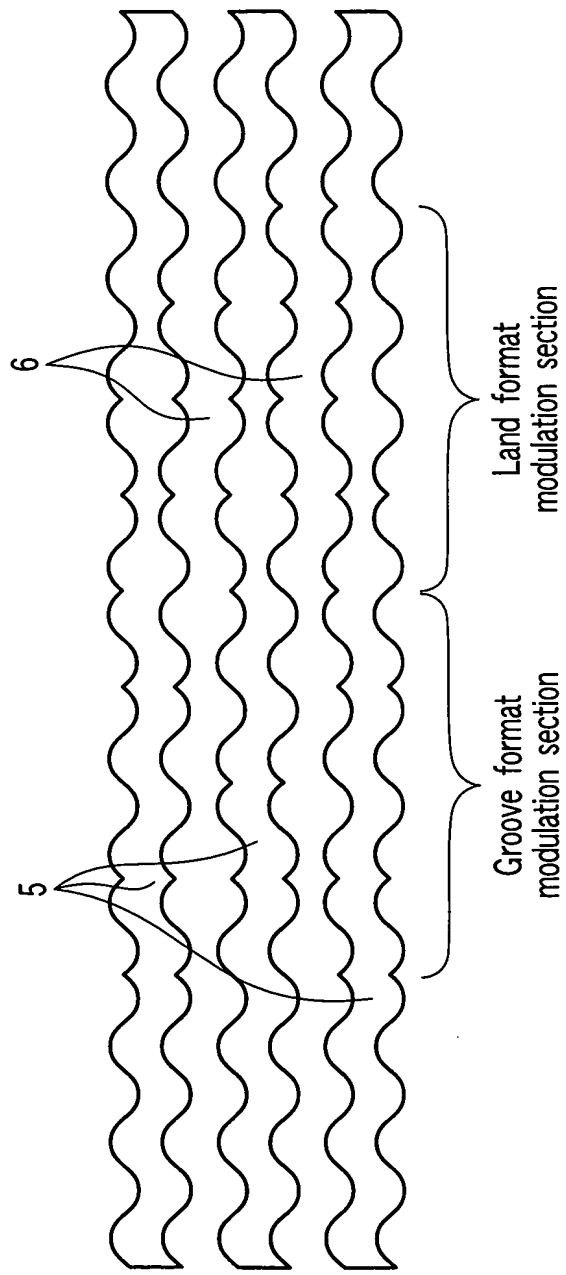


FIG. 9

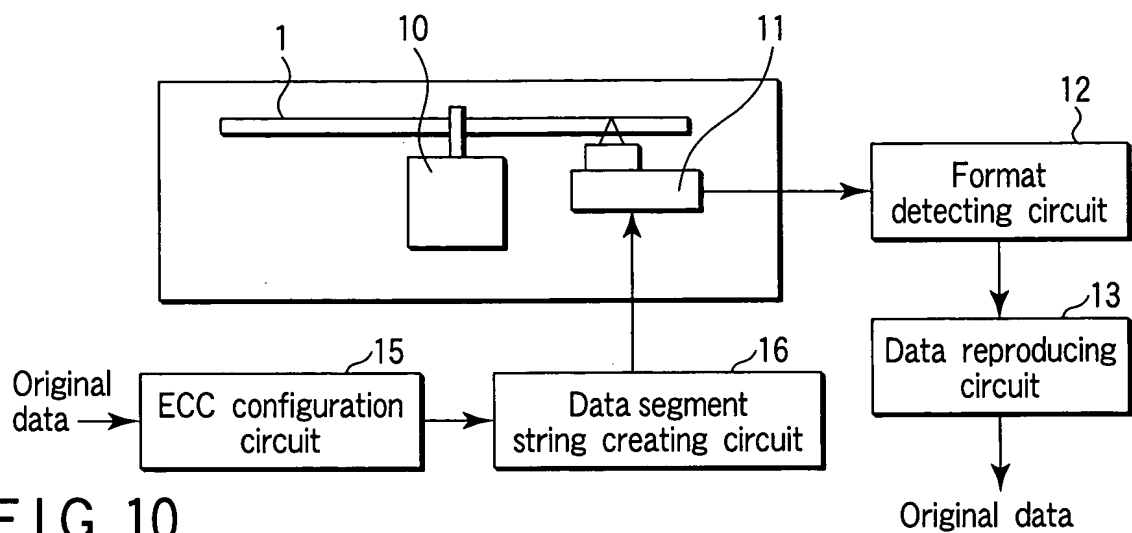


FIG. 10

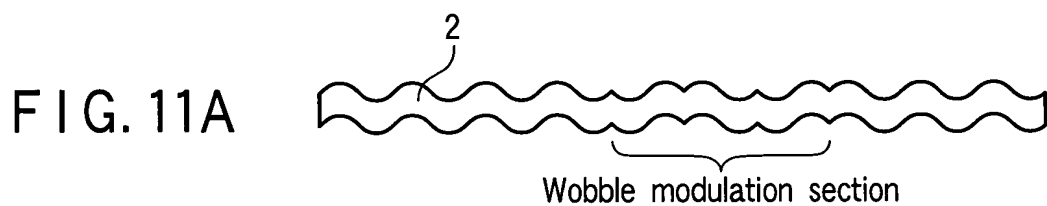


FIG. 11A

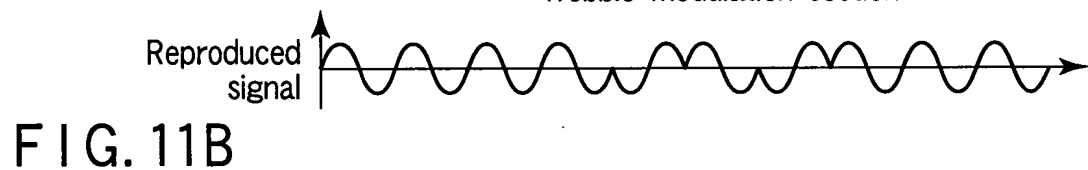


FIG. 11B

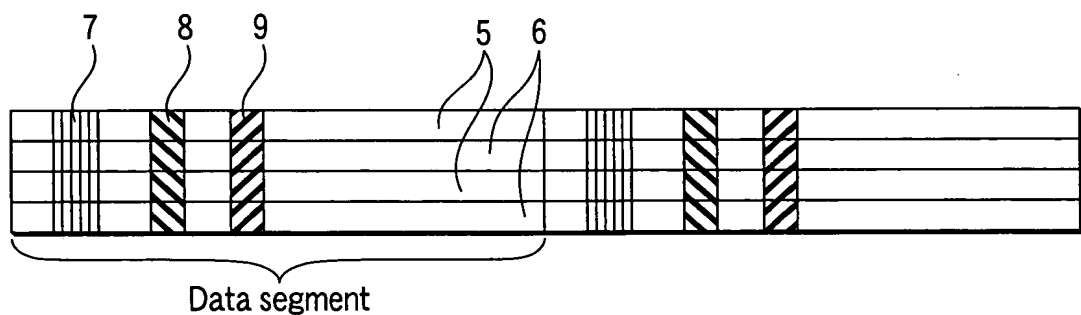


FIG. 12

FIG. 13

Binary code	Gray code
000000	000000
000001	000001
000010	000011
000011	000010
000100	000110
000101	000111
000110	001111

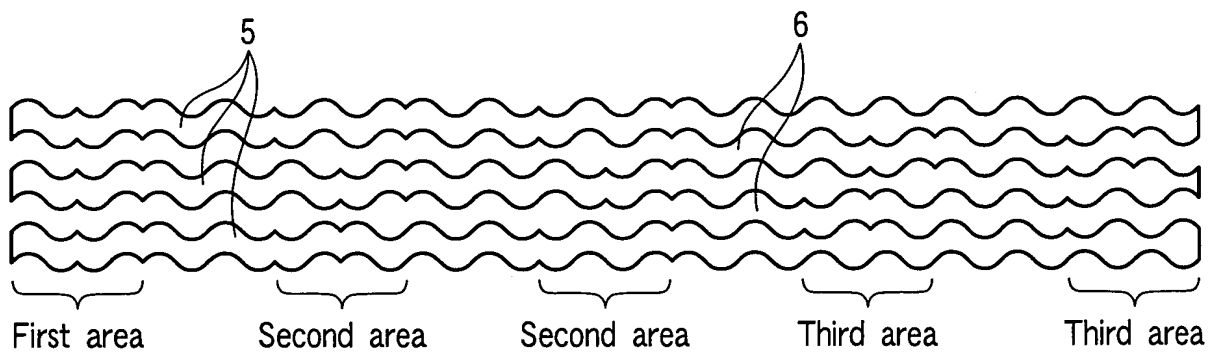


FIG. 14

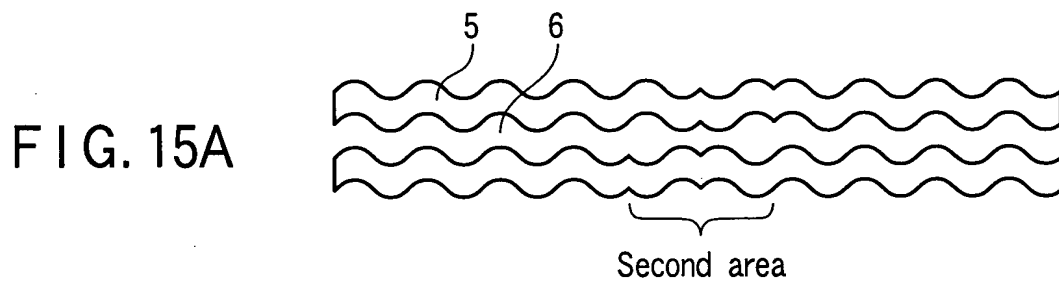


FIG. 15A

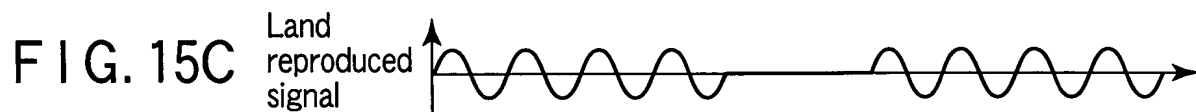


FIG. 15C

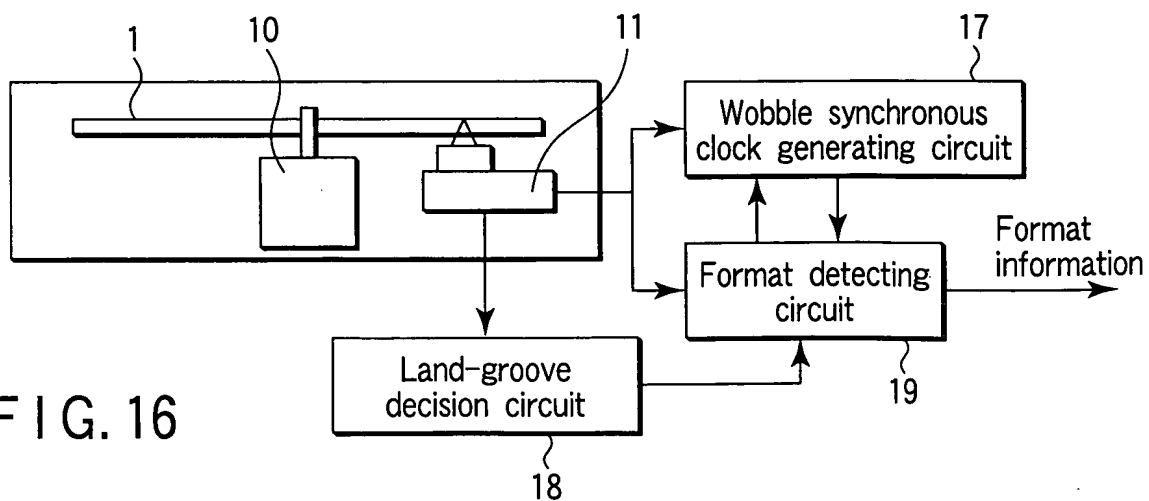


FIG. 16

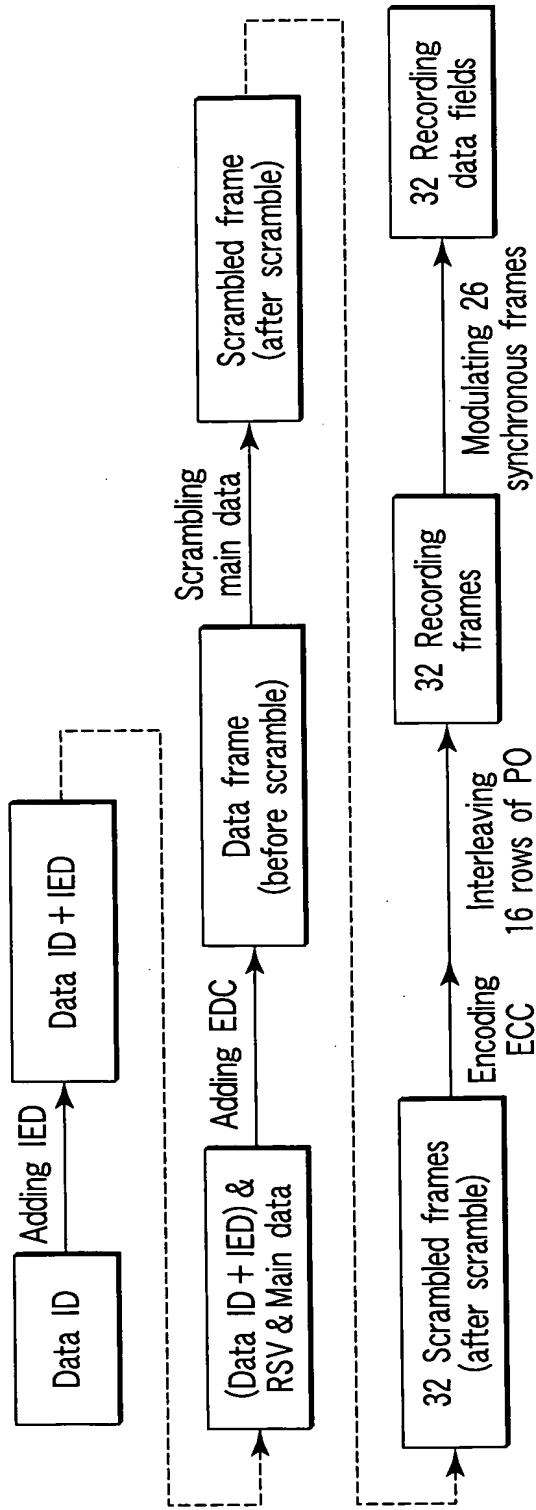


FIG. 17

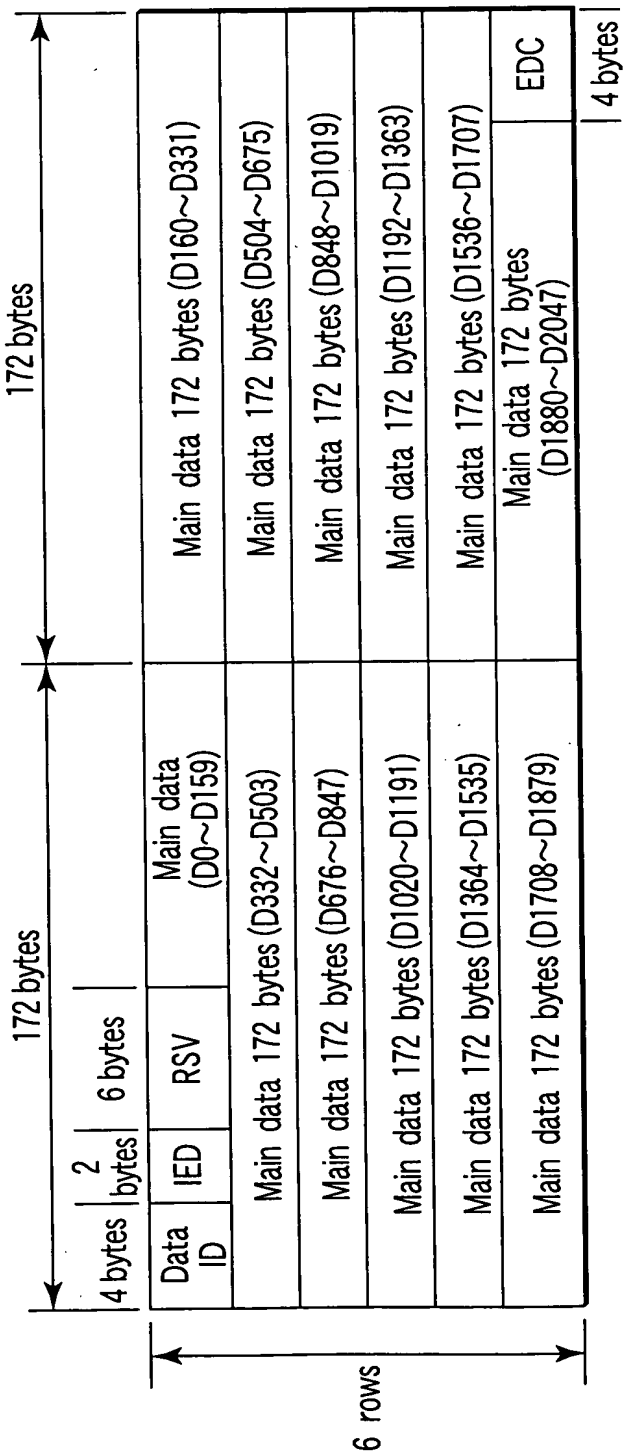
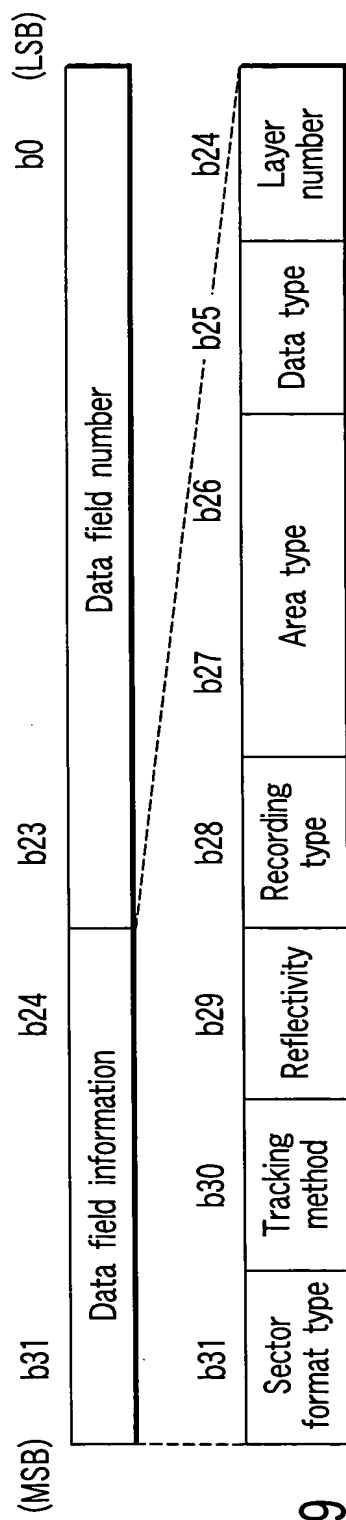
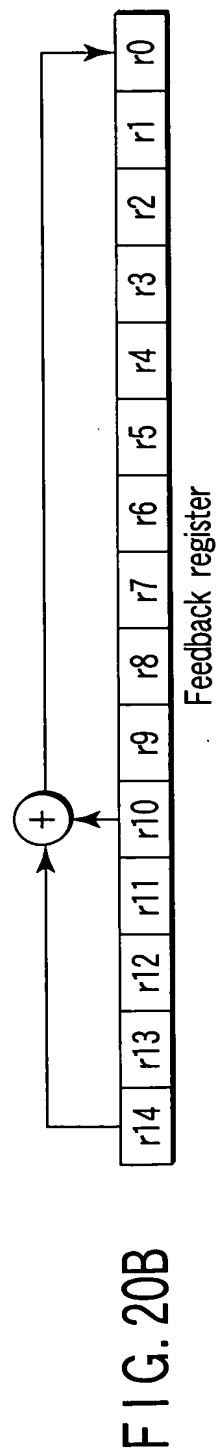


FIG. 18



Initial preset number	Initial preset value	Initial preset number	Initial preset value
0h	0001h	8h	0010h
1h	5500h	9h	5000h
2h	0002h	0Ah	0020h
3h	2A00h	0Bh	2001h
4h	0004h	0Ch	0040h
5h	5400h	0Dh	4002h
6h	0008h	0Eh	0080h
7h	2800h	0Fh	0005h







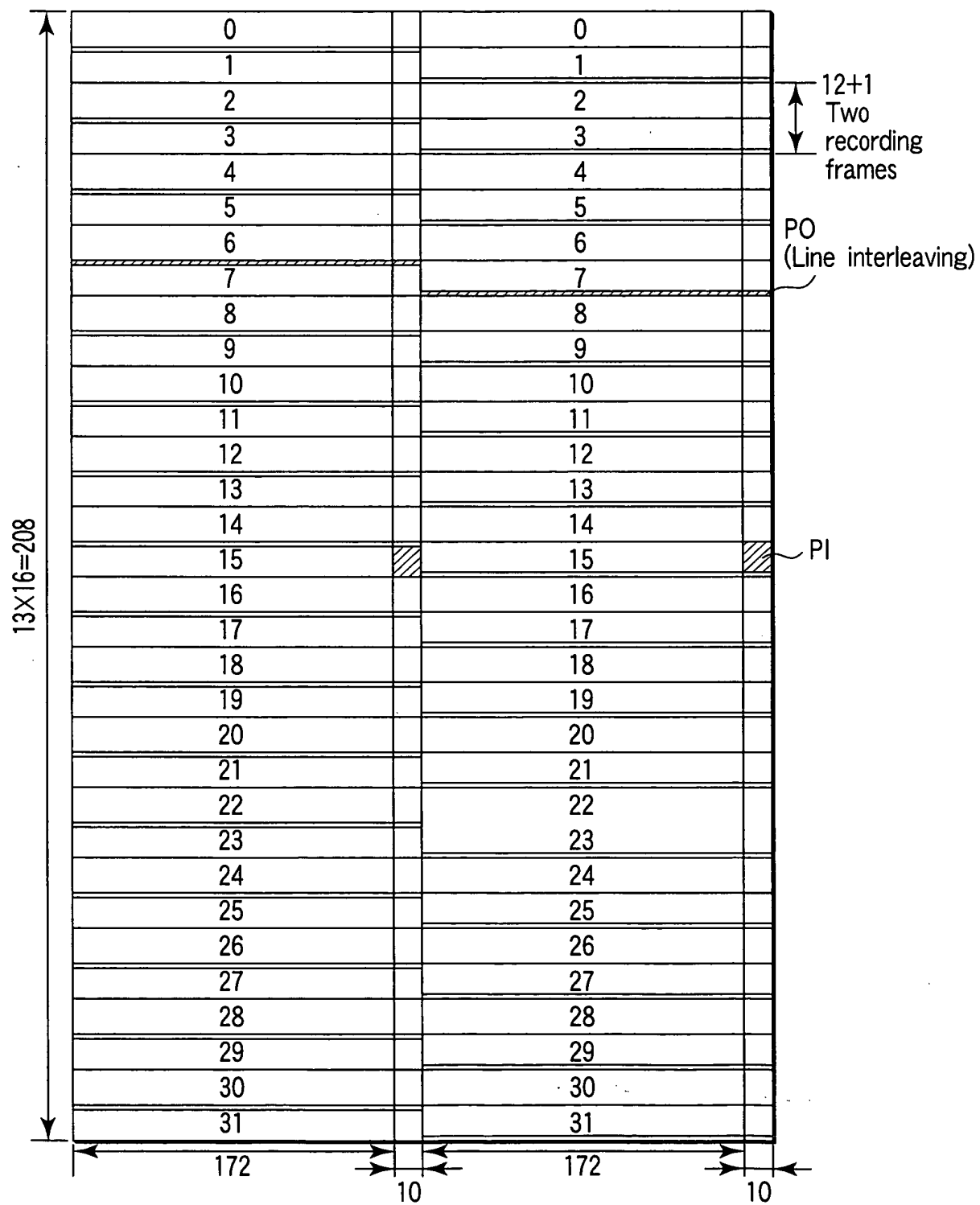
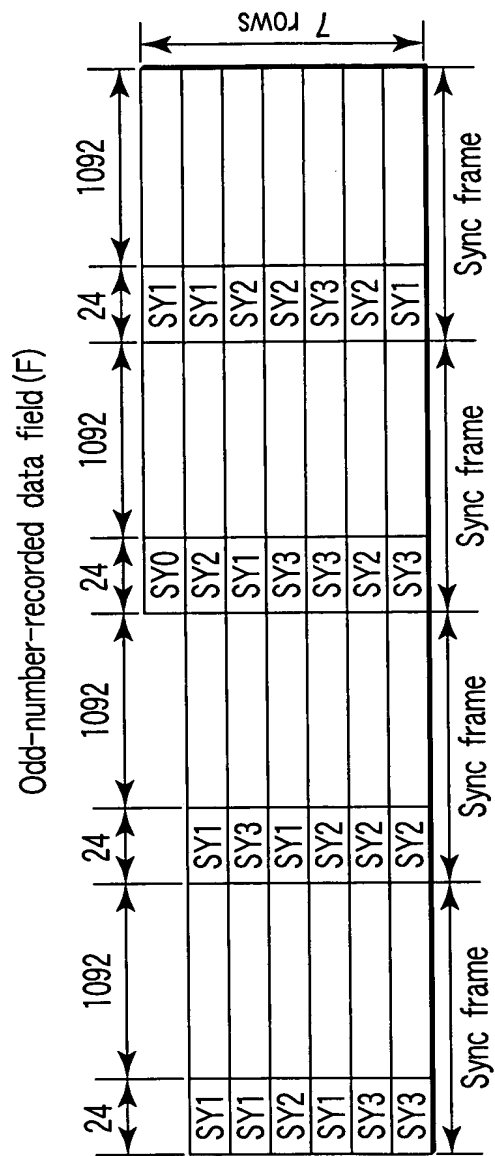
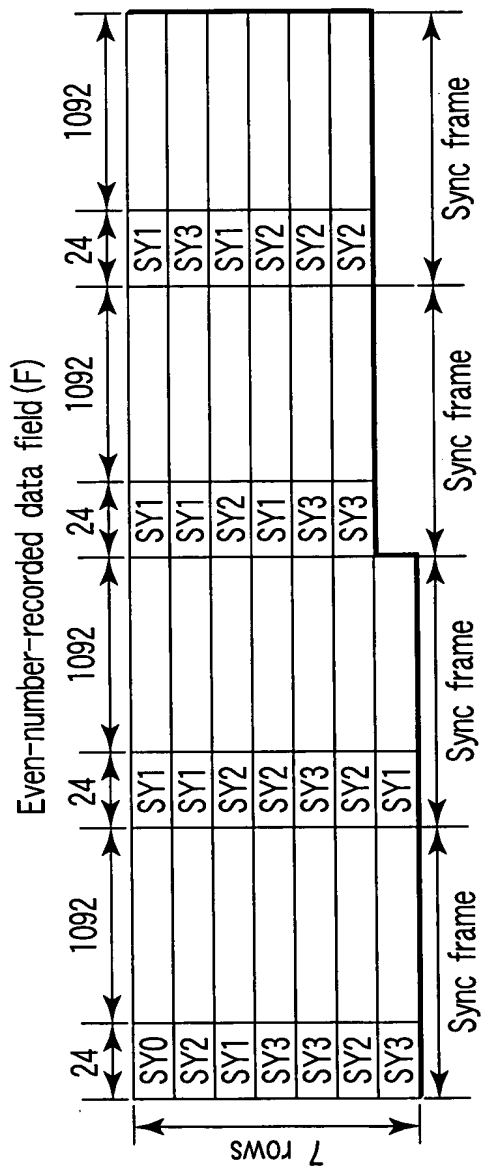


FIG. 23



<u>State0</u>			
	(MSB) Primary SYNC codes (LSB)	(MSB) Secondary SYNC codes (LSB)	
SY0 =	000010 101000 000000 001001 /	000010 001000 000000 001001	
SY1 =	100001 001000 000000 001001 /	100010 101000 000000 001001	
SY2 =	100100 001000 000000 001001 /	101000 101000 000000 001001	
SY3 =	101000 001000 000000 001001 /	101010 001000 000000 001001	
<u>State1</u>			
	(MSB) Primary SYNC codes (LSB)	(MSB) Secondary SYNC codes (LSB)	
SY0 =	000100 101000 000000 001001 /	000100 001000 000000 001001	
SY1 =	001001 001000 000000 001001 /	001010 101000 000000 001001	
SY2 =	010000 101000 000000 001001 /	010000 001000 000000 001001	
SY3 =	010100 001000 000000 001001 /	010101 001000 000000 001001	
(SYNC code)			

FIG. 25

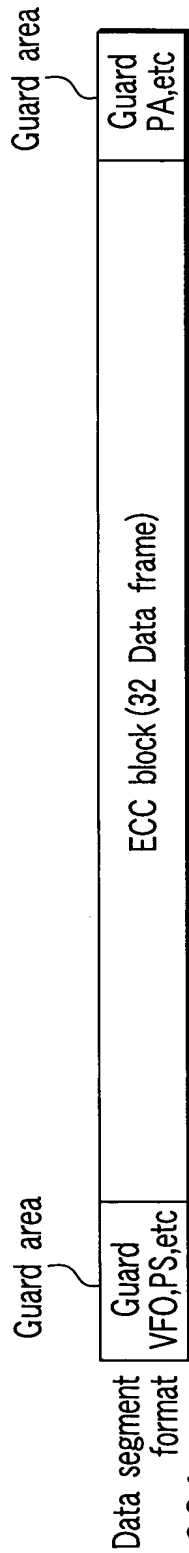


FIG. 26A

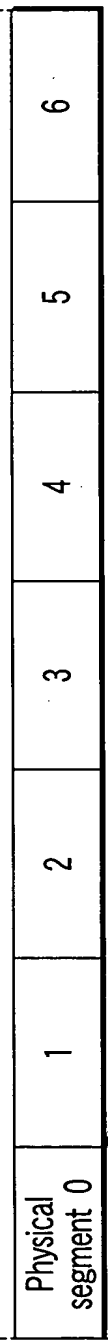


FIG. 26B

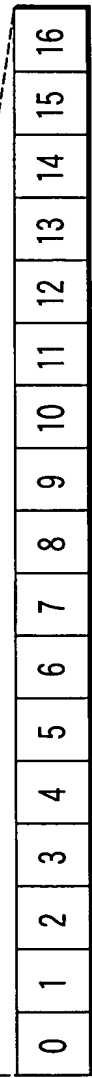


FIG. 26C

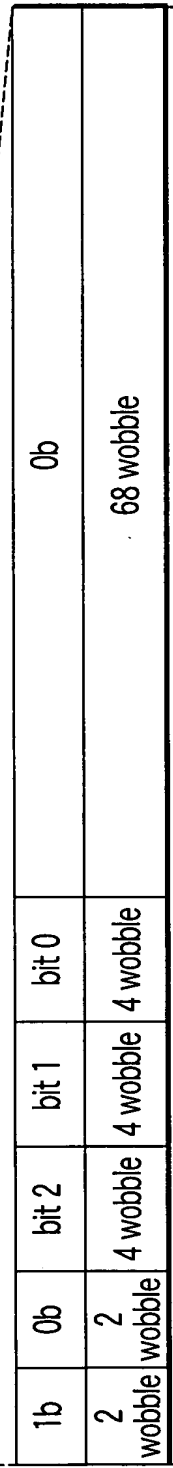


FIG. 26D

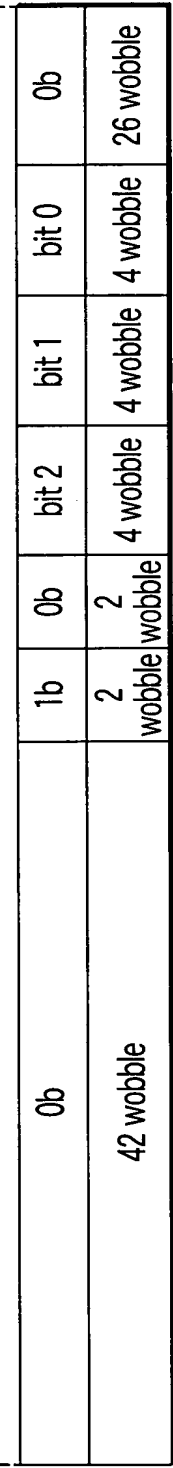
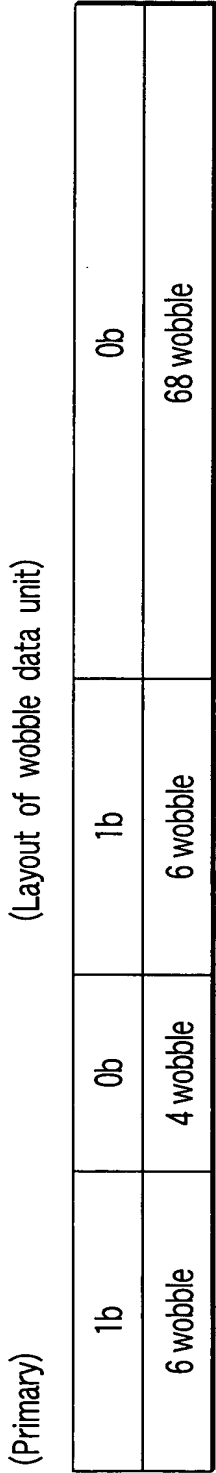
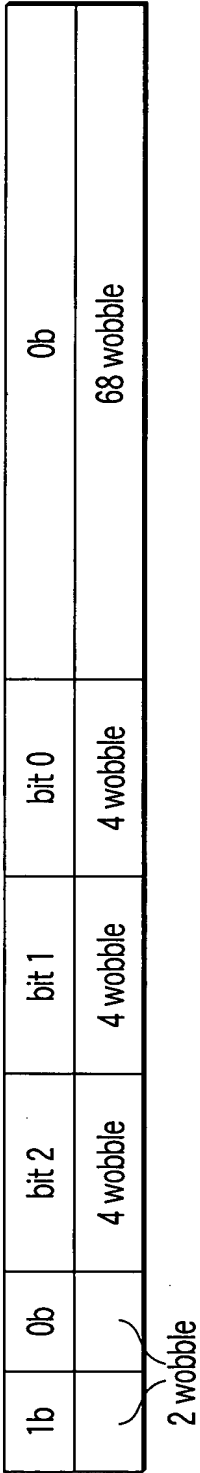


FIG. 26E



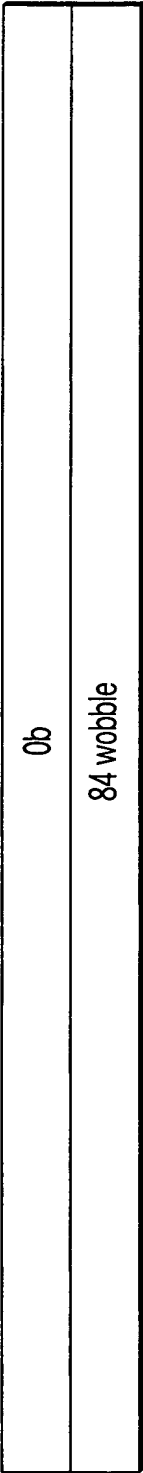
SYNC

FIG. 27A



Data

FIG. 27B



monotone

FIG. 27C

Wobble direction

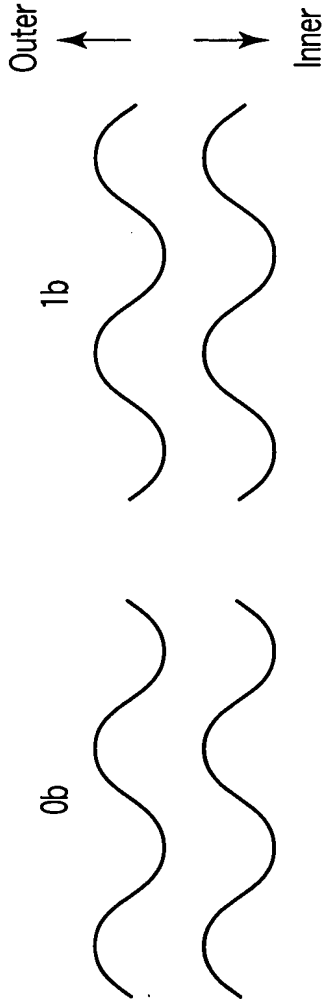


FIG. 27D

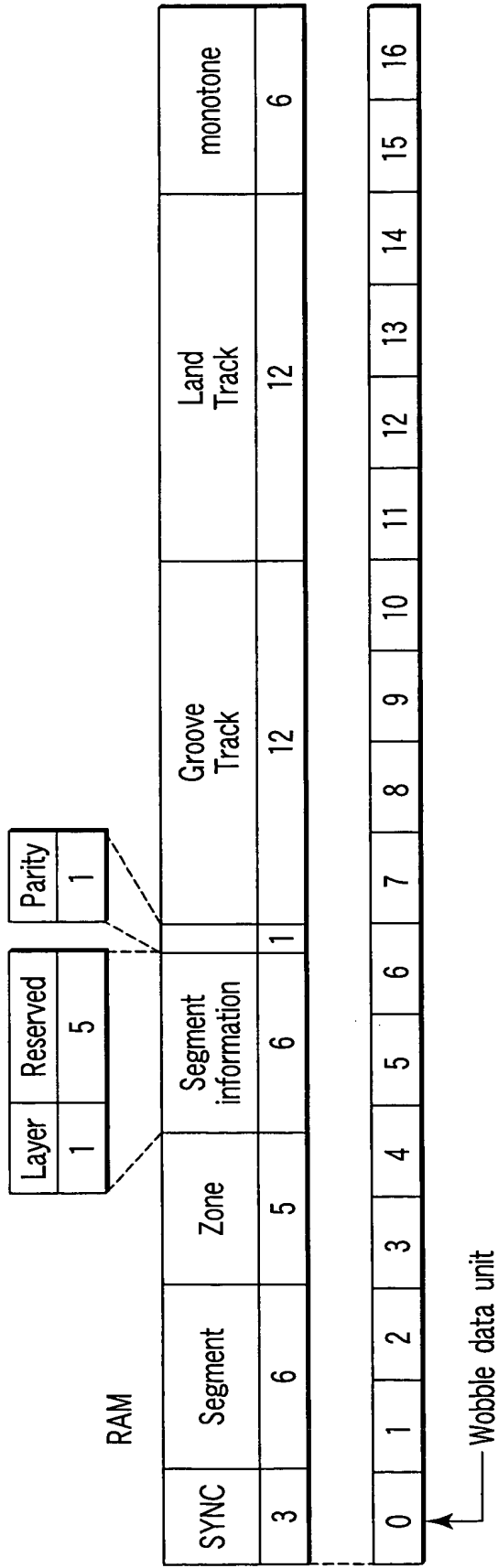


FIG. 28A

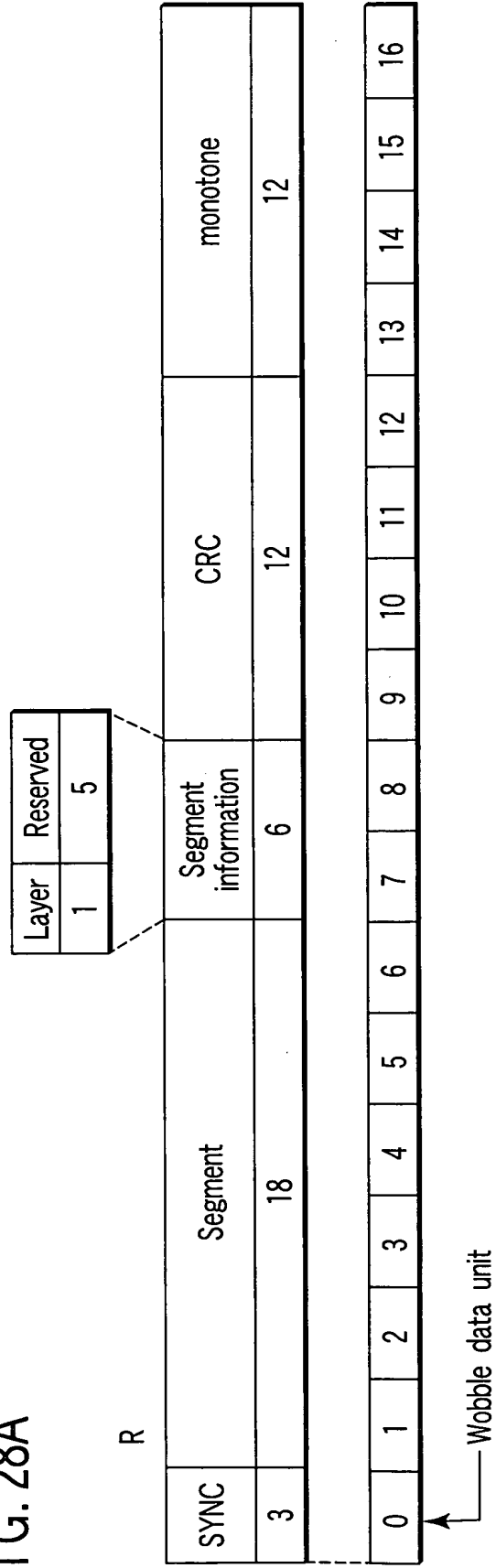


FIG. 28B

Outer edge  
of disk  
↑

Groove	SYNC	Segment	Zone	Segment information	Parity	Groove track (m+2)	-	monotone
Land	SYNC	Segment	Zone	Segment information	Parity	-	Land track (m+2)	monotone
Groove	SYNC	Segment	Zone	Segment information	Parity	Groove track (m+1)	-	monotone
Land	SYNC	Segment	Zone	Segment information	Parity	-	Land track (m+1)	monotone
Groove	SYNC	Segment	Zone	Segment information	Parity	Groove track (m)	-	monotone
Land	SYNC	Segment	Zone	Segment information	Parity	-	Land track (m)	monotone

↓  
Inner edge  
of disk

FIG. 29



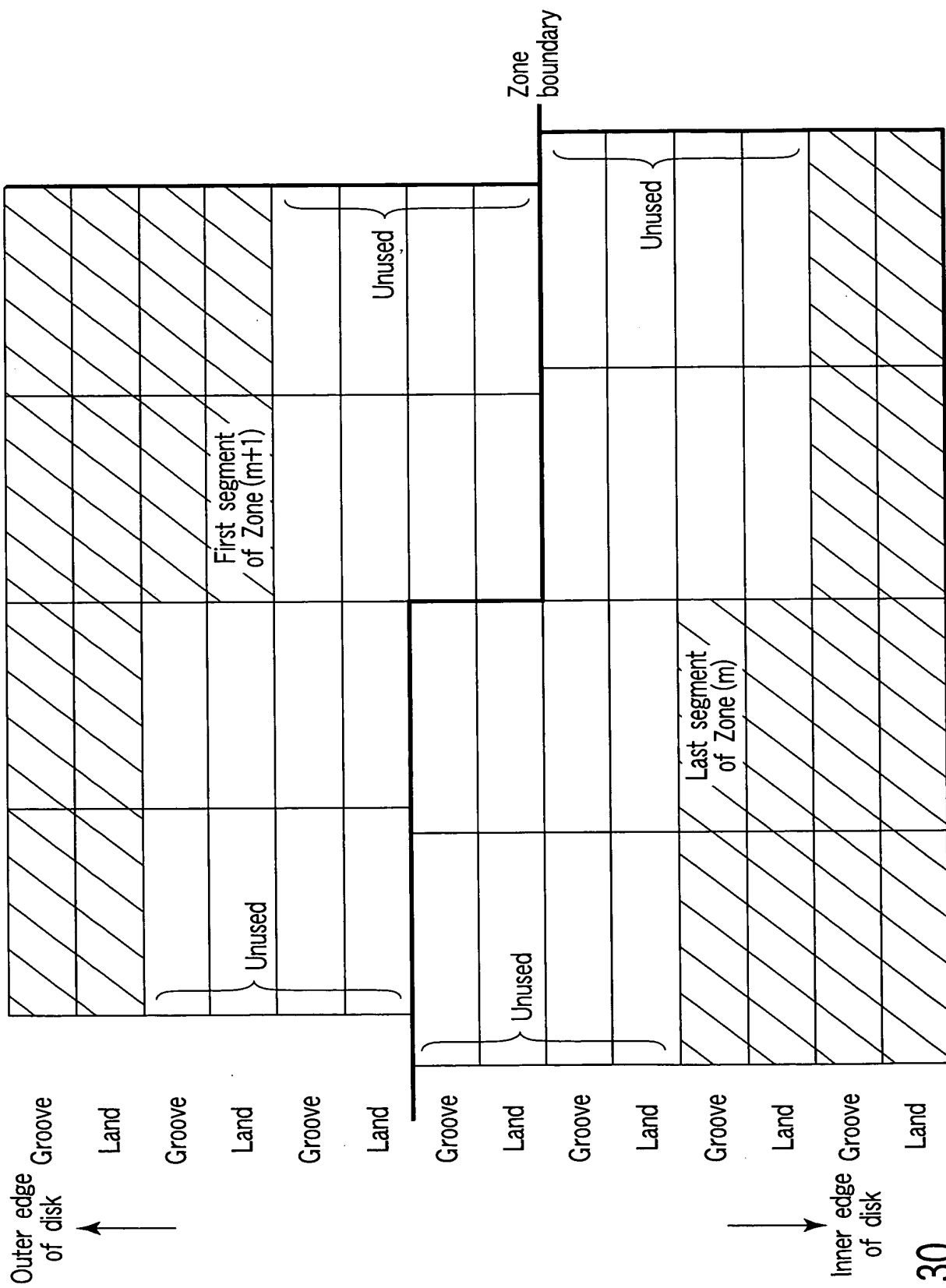
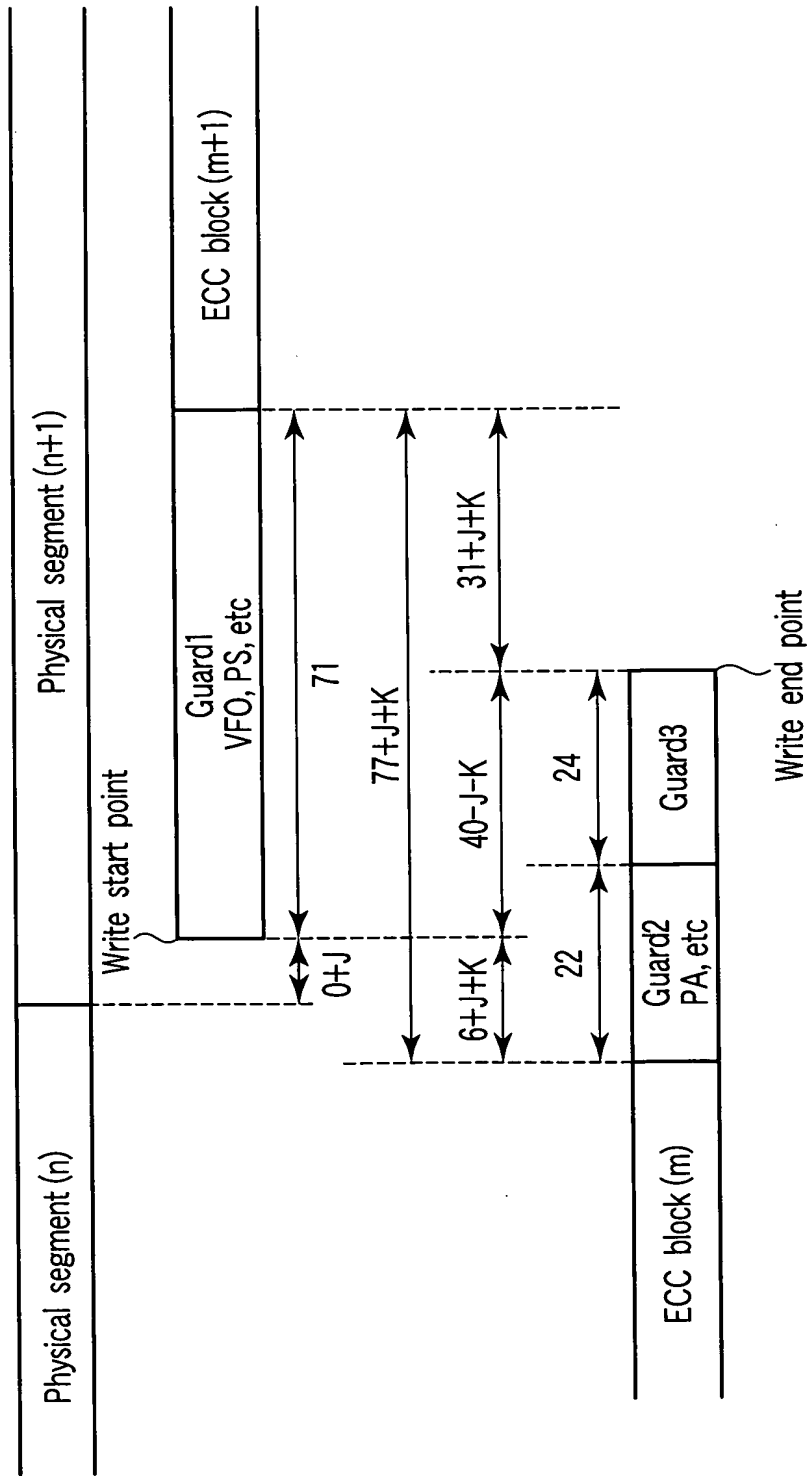


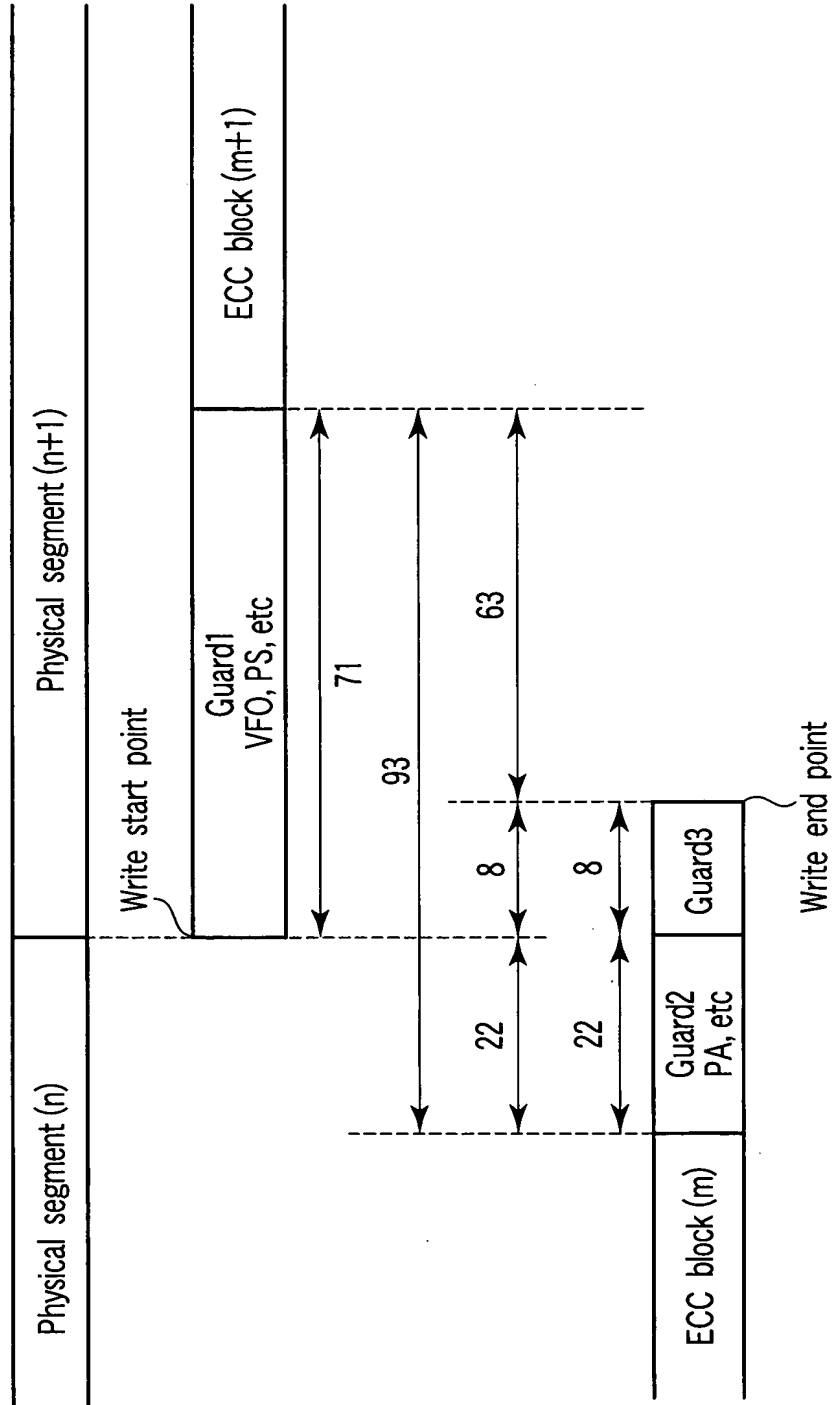
FIG. 30



Random shift  
 shift value for ECC block (m+1)  $J=0\sim15$   
 shift value for ECC block (m)  $K=0\sim15$

Minimum value of Guard 1 properly reproduced 31Byte  
 Minimum value of Guard 2 properly reproduced 6Byte  
 Minimum value of overlap to prevent unrecorded parts from being left 8Byte

FIG. 31



Guard 1 properly reproduced contains 47 bytes  
 Guard 2 properly reproduced contains 22 bytes  
 Overlap to prevent unrecorded parts from being left contains 8 bytes

FIG. 32

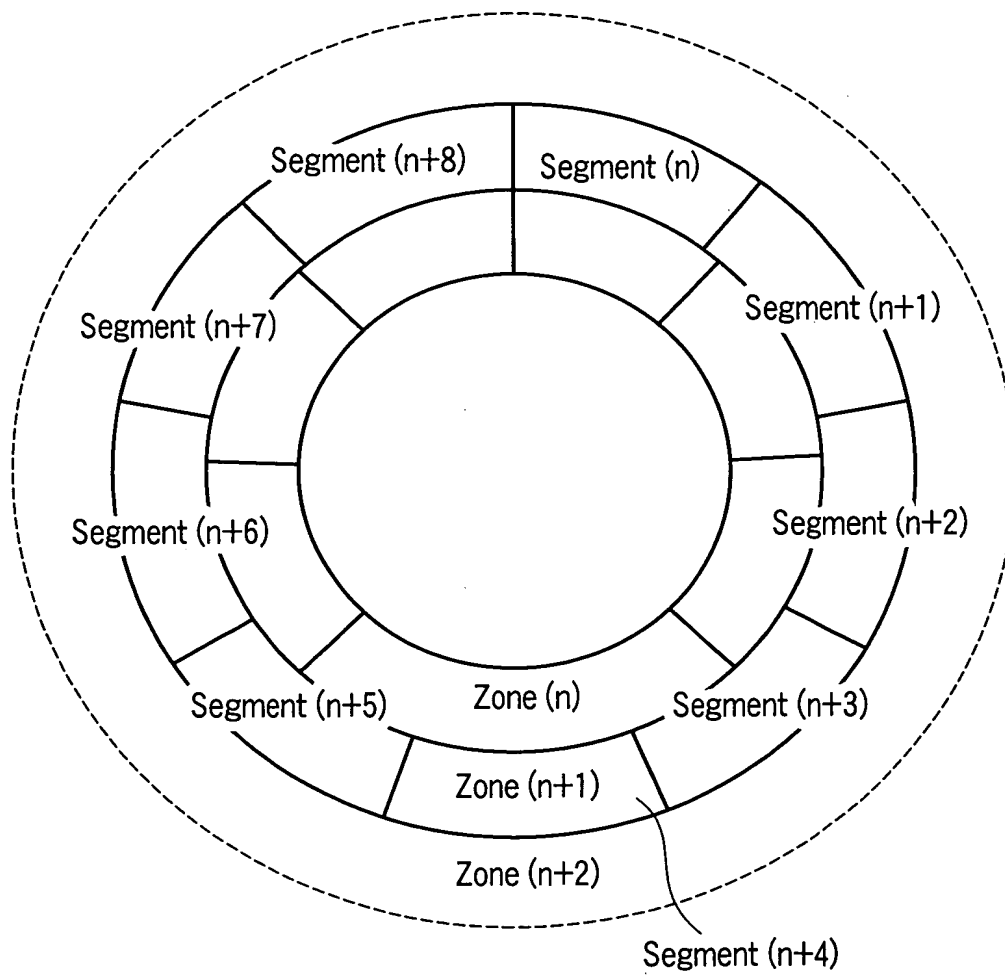


FIG. 33

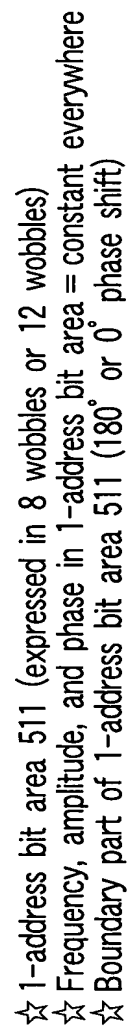


FIG. 34

Wobble modulation in L/G recording (principle of occurrence of indefinite bits)

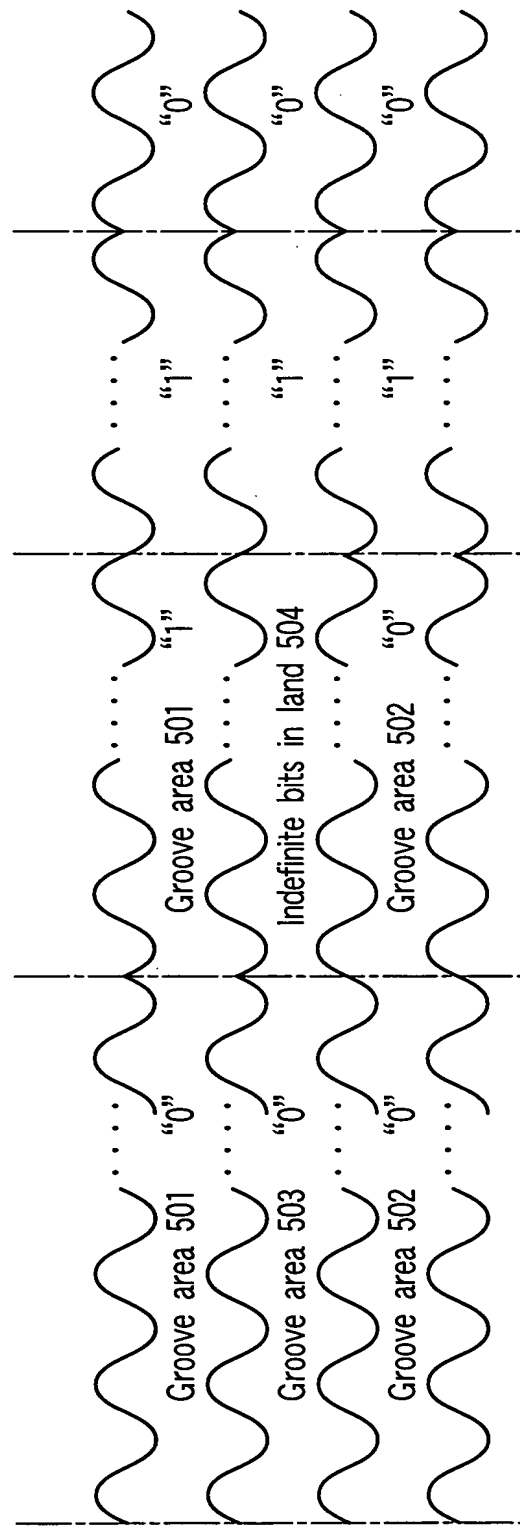


FIG. 35

Example of Gray code

Decimal number	Conventional binary representation	Gray code representation
0	0000	0000
1	0001	0001
2	0010	0011
3	0011	0010
4	0100	0110
5	0101	0111
6	0110	0101
7	0111	0100
8	1000	1100
9	1001	1101
10	1010	1111
11	1011	1110
12	1100	1010
13	1101	1011
14	1110	1001
15	1111	1000

FIG. 36

(Configuration of information recording and reproducing apparatus) (particularly centering on the recording system)

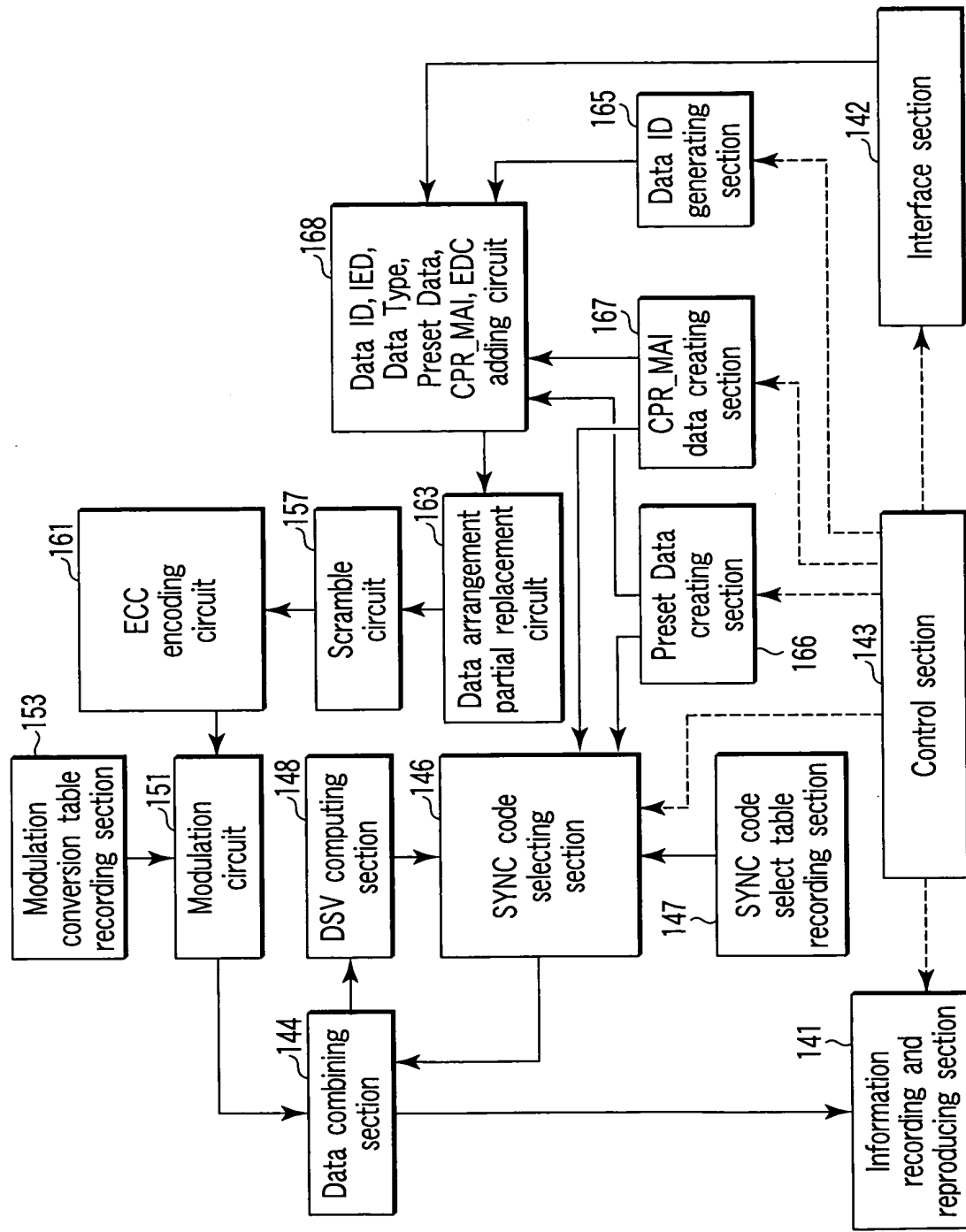


FIG. 37



(Configuration of information recording and reproducing apparatus) (particularly centering on the reproducing system)

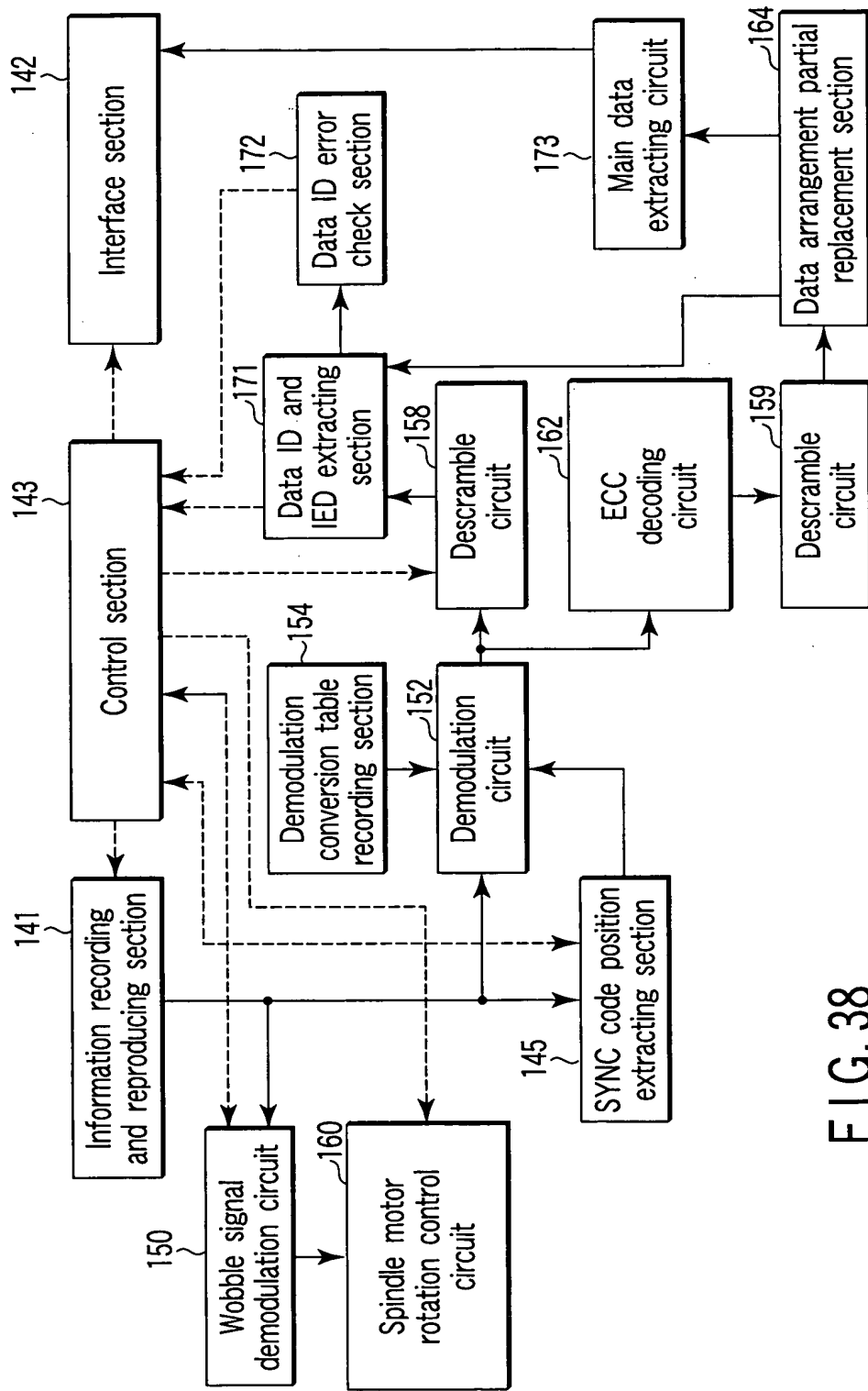


FIG. 38